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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,798	07/31/2003	Akihito Okayasu	P/647-143	1997

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EXAMINER
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CHOI, JACOB Y

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/631,798	Applicant(s) OKAYASU, AKIHITO	
	Examiner Jacob Y. Choi	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>17 March 2006</u> <u>8/25/06</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, *"the key backlight which is placed on a lower surface of the key input means and is lighted in a plurality of colors"* must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

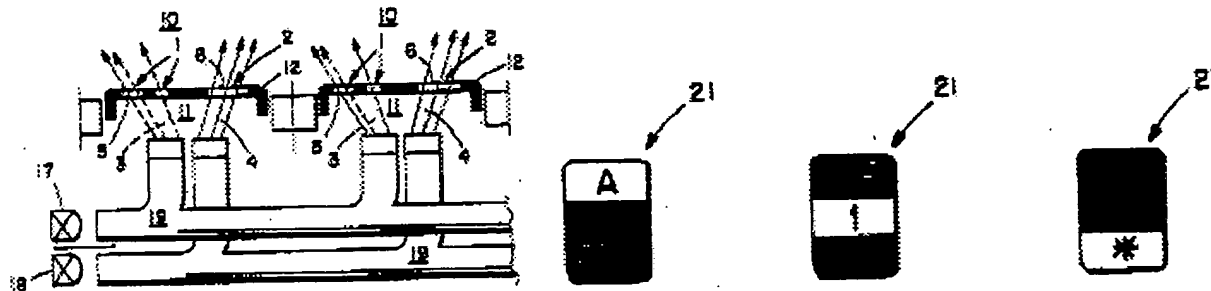
3. Claims **1, 2, & 9** are rejected under 35 U.S.C. 102(b) as being anticipated by Muurinen (USPN 5,408,060).

Regarding claim 1, Muurinen discloses key input means (e.g., 14) for inputting characters (e.g., Figure 7) by key input in a plurality of character (e.g., 1, 2, 3, ... A, B, C, ... etc.) input modes, switching means (e.g., column 4, lines 40-65; "... *only the symbol relating to the selected mode of operation is visible for each pushbutton, and the symbols relating to other modes of operation cannot be seen by the operator until the pushbuttons are switched to those other modes ... etc.*") for switching a plurality of character input modes, a key backlight (e.g., Figures 9-10) which is placed on a lower surface (e.g., column 3, lines 25-35; "... *This light source 7 is located below the underside 11 of the pushbutton 9 ... etc.*") of the key input means and is lighted in a plurality of colors (e.g., 17, 18), and key backlight lighting control means (e.g., 16; column 3, lines 5-15; "... *The first mode of operation and the second mode of operation may include other functions in addition to the alphabet and the figures ... The mode of operations is changed with the push button 16 (FCN) ... etc.*") for changing color and a lighting position of the key backlight so that backlights are lighted for each set of keys that can be used for each character input mode of the plurality of character input modes

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in accordance with switching of character input modes (e.g., column 4, lines 40-65;

Figures 9, 12A-12C).



Note: Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Things are clearly shown in reference patent drawing qualify as prior art features even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

In order to be given patentable weight, a functional recitation must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

A board range or limitation followed by linking terms (e.g., preferably, maybe, can be, for instance especially) and a narrow range or limitation within the broad range or limitation is considered indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

Regarding claim 2, Muurinen discloses the key input means comprises a plurality of keys (e.g., Figure 7), the key backlight (e.g., 19) comprises light-emitting means (e.g., 17, 18) located at lower surfaces of the respective keys (e.g., 15), and the key backlight lighting control means changes a lighting color of only the light-emitting mean located at the lower surface of a key which can be used for character input operation in a set character input mode (e.g., 16; column 3, lines 5-15; "... *The first mode of operation and the second mode of operation may include other functions in addition to the alphabet and the figures ... The mode of operations is changed with the push button 16 (FCN) ... etc.*").

Regarding claim 9, Muurinen discloses the key input device is included in a cell phone (e.g., Figure 7).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muurinen (USPN 5,408,060) in view of Kimura (USPN 6,762,740).

Regarding claim 3, Muurinen discloses claimed invention, explained above. However, Muurinen failed to teach details of storage means for correspondence data between a plurality of character input modes and plurality of colors.

Muurinen suggests the symbols or areas are selectively illuminated depending upon which mode is selected.

Kimura discloses the device comprises storage means (e.g., 12 and/or 13; Figure 2) for storing correspondence data between a plurality of character input means and a plurality of colors (E.g., 14), and when a signal indicating that a character input mode is switched is input from the key input means, the key backlight lighting control means (e.g., CPU) determines a lighting color of the key backlight by referring to the storage means (e.g., column 4, lines 25-45; "... the color of the backlight is varied corresponding to each function ... the main body 1 has a backlight that lights at least the key input

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*portion or the LCD portion from the rear ... the backlights in, for example, seven colors that are red, blue, yellow, green, purple, orange, and white ... as with the LCD portion, LED indicator lights in seven colors ... etc).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a backlight assembly of Muurinen and combine with teachings of Kimura to include storage means for storing correspondence data between a plurality of character input modes and a plurality of colors, which would be desirable to the users providing a personalized ecstatic appearance for his/her hand held phone device.

Regarding claim 4, Muurinen in view of Kimura disclose the claimed invention, explained above. In addition, Kimura discloses the storage means comprises first storage means, which cannot be overwritten (e.g., 13), and the correspondence data is stored as an initial setting value in the first storage means.

Regarding claim 5, Muurinen in view of Kimura disclose the claimed invention, explained above. In addition, Kimura discloses the storage means comprises second storage means (e.g., 12) which can be overwritten, and the key back light lighting control means writes the correspondence data as a user setting value in the second storage means.

Regarding claim 6, Muurinen in view of Kimura disclose the claimed invention, explained above. In addition, Kimura discloses the key backlight lighting control means

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preferentially refers to a user setting value when the user setting value is stored (e.g., "*schedule function, anniversary function, calendar function ... etc*"; Figure 3).

Regarding claim 7, Muurinen in view of Kimura disclose the claimed invention, explained above. In addition, Kimura discloses the storage means further comprises key backlight application setting lighting color data for setting a lighting position of the key backlight, and the key backlight lighting control means determines a lighting color of the key backlight by referring to at least one of key backlight application setting lighting color data and key backlight application setting lighting position data (e.g., Figures 6, 7).

Regarding claim 8, Muurinen in view of Kimura disclose the claimed invention, explained above. In addition, Kimura discloses the key backlight lighting control means obtains, from a source external to the key input device, key backlight application setting lighting color data and key backlight application setting lighting position data.

### ***Response to Amendment***

6. Examiner acknowledges that the applicant has amended claims 1, 8, & 9.

Claims 1-9 are pending in the application.

### ***Response to Arguments***

7. Applicant's arguments, see pages 5-7, filed February 17, 2006, with respect to claims 1-9 have been fully considered and are persuasive. The claim rejections - 35 USC § 102 & 103 of November 17, 2005 has been withdrawn. However, claims 1-9 are now reconsidered and are moot in view of the new ground(s) of rejection.



**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bar-Yona (USPN 6,805,506) – keyboard with multiple indicia sets


Kandogan et al. (USPN 6,765,556) – two-key input per character text entry apparatus and method

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

  
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